

IN THE CLAIMS:

Claims 1-9 (Cancelled)

10. (Currently amended) An optical spectrometer comprising:
an exit slit for spatial wavelength selection of spatially separated wavelengths, and

a detector for the light penetrating through the exit slit,
wherein the exit slit is formed by an entering area of a first ~~the~~ end of the light waveguide, and the detector is disposed at a second ~~the other~~ end of said light waveguide.

91. 11. (Currently amended) The optical spectrometer according to claim 10, wherein the first end of the light waveguide is only sloped on both lateral sides of the entering area designed rectangularly.

12. (Currently amended) The optical spectrometer according to claim 10, wherein the first end of the light waveguide is sloped such that light entering into the sloped surfaces is not further guided in the core of the light waveguide.

13. (Currently amended) The optical spectrometer according to claim 10, wherein the first end of the light waveguide is symmetric with respect to an axial plane of the light waveguide.

14. (Currently amended) The optical spectrometer according to claim 10, wherein the entering area ~~surface~~ is narrower than the core diameter of the light waveguide, and around the entering area a vapor deposited opaque metal layer is provided.

15. (Original) The optical spectrometer according to claim 10, wherein the entering area is at least as long as the core diameter of the light waveguide.

92 16. (Currently amended) The optical spectrometer according to claim 10, wherein the first end of the light waveguide is only sloped on both lateral sides of the entering area designed rectangularly, the first end of the light waveguide is sloped such that light entering into the sloped surfaces is not further guided in the core of the light waveguide, the first end of the light waveguide is symmetric with respect to an axial plane of the light waveguide, and the entering area is at least as long as the core diameter of the light waveguide.

17. (New) An optical spectrometer comprising:

a light detector; and

93 a fiber optic light waveguide having at its one end an exit slit positioned to receive a selected wavelength of spatially separated light, the fiber optic light waveguide having its other end coupled to the light detector, the light detector receiving the selected wavelength of the spatially separated light entering the exit slit and travelling through the fiber optic light waveguide;

94 wherein the exit slit includes a light entering area through which the selected wavelength enters the fiber optic light waveguide and a sloped area in which the light entering into the sloped area is diffracted away from the core of the fiber optic light waveguide.

18. (New) The optical spectrometer according to claim 17, wherein the entering area of the exit slit is a flat rectangular area and both lateral sides of the entering area are sloped to define the sloped area.

19. (New) The optical spectrometer according to claim 18, wherein the narrow side of the flat rectangular entering area is shorter than the core diameter of the fiber optic light waveguide.

20. (New) The optical spectrometer according to claim 18, wherein the exit slit is symmetric with respect to an axial plane of the fiber optic light waveguide.

21. (New) An optical spectrometer comprising:

a light detector; and

a fiber optic light waveguide having at its one end an exit slit positioned to receive a selected wavelength of spatially separated light, the fiber optic light waveguide having its other end coupled to the light detector, the light detector receiving the selected wavelength of the spatially separated light entering the exit slit and travelling through the fiber optic light waveguide;

wherein the exit slit includes a light entering area through which the selected wavelength enters the fiber optic light waveguide and a vapor deposited opaque metal layer is formed around the entering area to block the spatially separated light from entering into the fiber optic light waveguide.